

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012419**Date Inspected:** 24-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 7AW/7BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW7B-002. The welder is identified as #068917 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW7B-004. The welder is identified as #037996 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW7B-005. The welder is identified as #067752 and was

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observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

### Segment 6CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW6F-008. The welder is identified as #062092 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

This QA Inspector observed grinding of the weld profile on the Vertical WT-stiffener to Edge Plate connection, cross beam side.

This QA Inspector observed ZPMC personnel performing MT on the vertical WT-stiffener web to Edge Plate connection, cross beam side at panel points 44-45.

This QA Inspector observed ZPMC perform MT at removed fit up plates along Side Plate CJP segment Splice.

This QA Inspector observed grinding of MT indications marked by ZPMC personnel at locations of removed fit up plates.

### Segment 6AW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing (MT) on the Side Plate WT-stiffener hold back fillet welds, counter weight side panel point 37.

### Segment 7CE

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) on the Deck Plate to Edge Plate CJP splice, cross beam side. D scan was performed.

### CB7

This QA Inspector observed ABF personnel performing UT on the Deck Panel to Side Panel, East and West Side. D scan was performed.

### Segment 6BW

This QA Inspector observed grinding of the Top Counter Weight Connection Plate CJP splice root pass after arc gouging panel points 43-44.

ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

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documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hernandez,Dan
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Miller,Mark
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QA Reviewer
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